Cervical Lymphatic Malformations

What is a lymphatic malformation?
In our body we have different types of blood vessels. Most people are familiar with arteries and veins but there is another system of vessels called lymphatics. These drain not blood but a clear fluid called lymph from around the body. The lymphatic vessels join together to drain into the large veins in the neck. Sometimes children are born with abnormalities in these lymphatic vessels and instead of narrow channels they form wide ones. These then fill with lymph fluid to form cysts which cause swelling around the body but usually in the neck. The old term cystic hygroma meant 'water filled sac'. A more accurate term is lymphatic malformation which characterizes the abnormality; it is part of the vascular malformation family. The size and location of lymphatic malformations varies enormously from massive problems in newborn babies which obstruct the breathing and feeding to minor cosmetic cysts in older children. For this reason everyone has to be evaluated individually.

Is it a tumour?
It is not a cancer and does not spread around the body. It is more like a type of birth mark.

Will it grow?
Growth patterns are variable and to some degree unpredictable. Lymphatic tissue generally slowly grows as the children grow and the cystic hygromas tend to grow as well. Bleeding into the malformation can occur spontaneously and result in a sudden increase in size. Episodes of sudden swelling following colds and infections are not uncommon and these generally settle down again. They are related to increased fluid within the cyst. Sometimes a course of antibiotics is required or rarely an abscess forms requiring drainage. Occasionally however cystic hygromas shrink down or even (rarely) disappear.

What about treatment?
There are 3 options for any lymphatic malformation. As they are all different there is no substitute for detailed imaging (with MRI scanning) and assessment by someone experienced in managing them usually including the multidisciplinary vascular anomaly clinic (MDVAC).

Option 1 - simple observation This is generally recommended for small lesions that are causing minor symptoms only.

Option 2 - surgery If the lesion can be completely removed without damaging other structures then it will not come back and this is the end of it. This is what many patients would like to achieve. An experienced surgeon needs to evaluate the lesion to identify whether this is possible and what risks are involved. In general terms large cysts (macrocysts) are more favourable as our lesions in the neck. If small cysts are left behind after surgery because they are inaccessible they may never cause problems (see below with sclerotherapy all the cysts are left in). Problems in the tongue and mouth are more difficult to remove completely although surgery to this area to reduce the problems may be appropriate. Cysts on the tongue surface may be treated with laser surgery.

Option 3 - sclerotherapy The principle of sclerotherpay is to inject a substance into the cyst which causes inflammation. Following the injection the cyst increases in size (sometimes dramatically) then gradually reduces in size over the next 3 months or so. If the response is incomplete injections can be repeated. The attraction of sclerotherapy is that it avoids surgery and often avoids a scar and risks of nerve damage are less. Unfortunately complications can occur with sclerotherapy including scarring and severe reactions. Bleomycin is the preferred agent for injection in Belfast.